

*App/ No. 09/814044***PATENT**
*IBM Docket No. RAL920000083US1***Amendments to the Claims:**

1. (Currently Amended) A low power DSL modem transmitter, suitable for incorporation in integrated DSL server line cards comprising:
first means for generating full power physical frames including a control channel signal component and a data channel signal component when the transmitter is provided with data to transmit; and;
a control channel generating circuit responsive to the first means and operable to generate a control signal when the transmitter has no data to transmit;
second means for generating low power physical frames having a control channel signal component and when the transmitter has no data to transmit; and[.]
third means responsive to the second means control signal for selecting the frames generated by the first and second means wherein selection of the second means is based only on said transmitter having no data to transmit and not on results of negotiations between said transmitter and a remote entity.
2. (Original) The low power DSL modem transmitter set forth in claim 1 in which the second means includes a low power synchronization signal in the generated low power physical frames.
3. (Original) The low power DSL modem transmitter set forth in claim 2 in which the low power synchronization signal is an idle pattern.

Appl No. 09/814044

PATENT
IBM Docket No. RAL920000083US1

4. (Currently amended) A method for operating a low power DSL modem transmitter suitable for incorporation in integrated DSL server line cards, comprising the following steps:

generating first full power physical frames including a control channel and a data field when data is available for transmission;

~~Generating generating~~ second low power physical frames having a control channel when no data is available for transmission; and,

selectively transmitting the first full power physical frame when there is data to transmit and the second low power physical frame only when there is no data available for transmission and not on a result of negotiations between the transmitter and another entity.

5. (Original) The method set forth in claim 4 in which the generated second low power physical frame includes a low power synchronization field.

6. (Currently amended) The method set forth in claim 4 in which the generated second low power physical frame includes a low power idle pattern.

7. (Currently amended) In a communication system having a Digital Subscriber Line Access Multiplexer (DSLAM) DSLAM including a plurality of DSL modems each having dual power capability in which the each modem transmits a reduced power frame suitable to maintain synchronization when it has no data to transmit, a method for controlling the total power dissipated by the DSL modems comprising the following steps:

monitoring the data transmission activity of the DSL modems;

periodically calculating the power dissipated in the plurality DSL modems transmitting data;

comparing the calculated power dissipated to a predetermined value; and,

Appl No. 09/814044**PATENT**
IBM Docket No. RAL920000083US1

reducing the total dissipated power by limiting the amount of data destined for selective DSL modems.

8. (Original) The method set forth in claim 7 in which the total dissipated power is reduced by buffering data destined for selective DSL modems.

9. (Original) The method set forth in claim 7 in which the total power is reduced by initiating a data flow control regime.

10. (Original) The method set forth in claim 7 in which the total power is reduced by selectively discarding physical data frames destined for selected DSL modems.

11. (Original) The method set forth in claim 7 in which the total power is reduced by applying back pressure to the data source.